



Warner Bros Studios Seismic Retrofit

Full Mitigation Best Practice Story

Multiple Counties, California

Burbank, CA – Over the last ten years, Burbank has experienced many earthquakes. Two of the most notable were the 1987 Whittier Narrows earthquake and the 1994 Northridge earthquake. These two made Warner Bros. Studios especially cognizant of the potential for earthquake damage that could cause serious business interruption. In addition, their Burbank facility is adjacent to the Los Angeles River. In the event of severe rainstorms, surface ground water is prone to accumulate and overwhelm the area's usually sufficient drainage system.



In recognition of the severe impact a natural hazard could have on its business operations, Warner Bros. Studios established an Office of Emergency Services (OES) in 1987. They have expanded the emergency services operation beyond preparedness activities to preventing the damage through mitigation measures. In 1993, non-structural hazard mitigation work included seismic fastening of computers, furniture and shelving systems to avoid damage in a seismic event, with priority then being given to life safety, exits, and applications of heavy-duty film to windows.

After the Northridge earthquake struck the area, Warner Bros. Studios estimated that every \$1 spent on mitigation has saved the company \$10 in avoided loss. Following this event, the mitigation program became mandatory and has expanded to include new construction budgeting and collaborating with equipment designers to develop unique fastening systems for Warner Bros.' needs. Funding for the mitigation program is now a regular budgetary expense for the company.

In July 1997 the OES held training as an opportunity for staff to establish and update various logistical and prevention measures for the upcoming El Nino. The nature of previous El Nino damages sustained was analyzed, and actions were identified to prevent these damages from recurring.

Warner Bros. Studios has shared the mitigation message by reaching out to their community to share their experience with natural hazards preparedness and mitigation. Its OES has participated in community preparedness training in Burbank and West Hollywood. They view this community outreach as important to preserving the community infrastructure where their employees not only work but also live.

Due to the nature of their business, the entertainment industry, Warner Bros. Studios has been able to reach consumers throughout the nation with the importance of preparedness. When Warner Bros. Studios released its box office hit movie Twister on videocassette, FEMA produced and distributed over 100,000 copies of a multi-hazard preparedness video entitled "Prepare...to Survive." The video was free when renting the Twister movie at video stores throughout the country.

Activity/Project Location

Geographical Area: **Multiple Counties in a State**

FEMA Region: **Region IX**

State: **California**

County: **Los Angeles County; Orange County; San Diego County**

Key Activity/Project Information

Sector: **Private**
Hazard Type: **Earthquake**
Activity/Project Type: **Retrofitting, Non-structural**
Activity/Project Start Date: **01/1993**
Activity/Project End Date: **Ongoing**
Funding Source: **Business Owner; Private funds**
Funding Recipient: **Business/Industry**
Funding Recipient Name: **Warner Bros., Time Warner**

Activity/Project Economic Analysis

Cost: **Amount Not Available**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Unknown**
Value Tested By Disaster? **Yes**
Tested By Federal Disaster #: **No Federal Disaster specified**
Year First Tested: **1997**
Repetitive Loss Property? **Unknown**

Reference URLs

Reference URL 1: <http://neic.usgs.gov/>
Reference URL 2: <http://www.oes.ca.gov/Operational/OESHome.nsf/1?OpenForm>

Main Points

- Established an Office of Emergency Services (OES) and expanded the emergency services operation beyond preparedness activities to preventing the damage through mitigation measures.
- Non-structural hazard mitigation work included seismic fastening of computers, furniture and shelving systems to avoid damage in a seismic event, with priority then being given to life safety, exits, and applications of heavy-duty film to windows.
- Warner Bros. Studios has shared the mitigation message by reaching out to their community to share their experience with natural hazards preparedness and mitigation.